2/17~~16~~/15 ~~Navy/DLA~~EPA DRAFT

ATTACHMENT A

STATEMENT OF WORK

DEPARTMENT OF THE NAVY

RED HILL BULK FUEL STORAGE FACILITY

OAHU, HAWAII

Contents

[TOC \o "1-3" \h \z \u]

Introduction

This Statement of Work ("SOW") sets forth the tasks and requirements to be undertaken by the United States Department of Navy ("Navy") and the Defense Logistics Agency ("DLA"), in compliance with the Administrative Order on Consent ("AOC") in the Matter of Red Hill Bulk Fuel Storage Facility ("Facility"), located near Pearl Harbor, on the island of Oahu in the State of Hawaii. The primary objectives of the AOC and SOW are ~~to ensure the continued safe and secure operation of the Facility, and take steps~~ to ensure that the groundwater resource under the Facility is protected ~~while ensuring the continued safe and secure operation of the Facility~~. ~~Unless otherwise specified, the underground storage tanks or "tanks" covered by this agreement are the twenty (20) large bulk field-constructed tanks at the Facility.~~ The Navy, DLA, the Hawaii Department of Health ("DOH") and the Environmental Protection Agency ("EPA"), collectively referred to as "the Parties" in this SOW, agree that these objectives can best be accomplished by ensuring that the tanks and other infrastructure at the Facility deploy the best available practicable technology (BAPT) (as defined in Section 3) to prevent fuel releases, developing a better understanding of the hydrogeology of the area surrounding the Facility and conducting an assessment of the risk to the groundwater resources that may be posed by the Facility. The major components of the Work are summarized below:

(1) The Navy and DLA will improve upon an existing tank inspection and repair process to ensure that the tank infrastructure prevents releases of fuel to the maximum extent practicable;

(2) The Navy and DLA will undertake a comprehensive study to investigate the feasibility of upgrading the tank structures including, but not limited to, secondary containment. This study will evaluate several technologies, building on similar efforts conducted by the Navy in 1998 and 2008. After completing the study, a technology or technologies will be approved by DOH and EPA ("the Regulatory Agencies") and implemented by the Navy and DLA. Implementation will occur in phases so that all tanks in operation will deploy best available practicable technology ("BAPT"), as approved by the Regulatory Agencies, within 22 years of the effective date of the AOC or as otherwise provided for in this agreement.

(3) The Navy and DLA will, as an interim measure, double the frequency of their tank tightness testing from biennial to annual and continue to continuously monitor inventory. The Navy and DLA shall conduct the next round of tank tightness testing no later than one year from the effective date of this AOC. As set forth below, the Navy and DLA will also conduct a study to evaluate improvements to the tank tightness and release detection technologies deployed at the Facility and, pending the outcome of the study and approval by the Regulatory Agencies, implement improvements.

(4) The Navy and DLA will further develop models to better understand groundwater flow in the areas around the Facility and evaluate the fate and transport of contaminants in the subsurface. As set forth below, based on the modeling effort, as approved by the Regulatory Agencies, the Navy and DLA

will develop and improve the existing groundwater monitoring network to the extent determined necessary.

(5) The Navy and DLA will develop a risk/vulnerability assessment, subject to approval by the Regulatory Agencies, in an effort to further understand the potential for and potential impacts of fuel releases from the Facility on the island's drinking and groundwater supplies and to inform the Parties in development of subsequent BAPT decisions.

1. Overall Project Management

1.1 Subject Matter Experts Involvement

It is the intent of the Parties to seek the technical advice of subject matter experts, such as the Honolulu Board of Water Supply and the Hawaii Department of Land and Natural Resources, as needed, for scoping and review of key deliverables.

1.2 Community Involvement

The Parties will update the public jointly based on public interest and at the request of one of the Parties. The Navy and DLA shall submit a synopsis of each final report developed under the AOC, and this SOW, to the Regulatory Agencies who may make that synopsis available to the public.

1.3 Meetings

Meetings may consist of in-person, telephone, or video-conferences, the form of which will be based on budget constraints, schedules, and other considerations. Within ten (10) business days of a meeting, the Navy and DLA shall circulate a summary of the meeting to the Parties for concurrence. The Parties may request additional meetings beyond the meetings outlined in this SOW, as needed.

1.4 Regulatory Agency Written Responses

The Regulatory Agencies will provide joint, written responses for all responses to the Navy and DLA under Section 7 of the AOC (Regulatory Agencies' Approval of Deliverables).

1.5 Communications Between Parties

All Parties will make best efforts to maintain effective and timely communications with the other Parties to facilitate implementation of the AOC and this SOW.

1.6 Quality Assurance

The Navy and DLA shall include a discussion of quality assurance and quality control (QA/QC) procedures in each Scope of Work submitted to the Regulatory Agencies for approval as required in this SOW. The QA/QC procedures shall be used to ensure that environmental or other data generated meets standards established by the Parties.

Department of Defense Instruction 4120.24 establishes the Unified Facilities Criteria which are the facilities and infrastructure component of the Defense Standardization Program. Construction QA/QC shall, at a minimum, be designed to meet Unified Facilities Guide Specifications (UFGS) for

Quality Control Systems, including UFGS - 01 45 00. 00 10, and Quality Control UFGS - 01 45 00. 00 20 or successor guidance.

Issued under the authority of Secretary of Navy Instruction 5090.8A, Policy for Environmental Protection, Natural Resources, and Cultural Resources Program; Chapter 7 of Chief of Naval Operations Instruction 5090.1D, Environmental Readiness Program Manual, or successor guidance, shall be used, at a minimum, to establish requirements, policy, and responsibilities for establishing environmental quality system for activities and programs involving the collection, management and use of environmental data. QA /QC procedures shall, at a minimum, be designed to meet the requirements of DoD Policy and Guidelines for Acquisitions Involving Environmental Sampling and Testing (November 2007) or successor guidance.

Navy and DLA shall only use laboratories that have a documented quality system that complies with the "Uniform Federal Policy for Quality Assurance Project Plans" (March 2005), and the "EPA Requirements for Quality Management Plans for Environmental Data Operations (QA/R-5)" (EPA/240/B-01/003, March 2001), or equivalent documentation as determined by EPA.

1.7 Definitions

Unless otherwise specified, the terms used in this document shall have the meaning defined in 40 Code of Federal Regulations Part 280- *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks*.

2. Tank Inspection, Repair and Maintenance

The purpose of the deliverables to be developed and the work to be performed under this Section is to identify and evaluate tank inspection, repair and maintenance ("TIRM") procedures to ensure the continued integrity of the bulk fuel field constructed underground storage tank system at the Facility and to develop and implement improvements to these procedures to prevent releases to the environment.

2.1 Scoping Meeting(s) for TIRM Procedures Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the Scoping Meeting will be to detail the contents of the TIRM Procedures Report. During the meeting, ~~the options, criteria, and weighting factors for~~criteria for the decision making ~~and implementation to be performed under tasks 2.3 and 2.4 of this Section~~ will be discussed and a decision will be made as to whether additional Scoping Meetings are needed, ~~and all parties will communicate their preferences~~.

2.2 TIRM Procedures Report

Within 120 days from the final Scoping Meeting, the Navy and DLA shall submit a TIRM Procedures Report to the Regulatory Agencies. The TIRM Procedures Report shall describe the current procedures and evaluate options for improvements.

At a minimum, the TIRM Procedures Report will identify and evaluate the following:

- Current tank inspection, repair and maintenance procedures; and

- Lessons learned from Tank 5 and related modifications to current procedures; and
- Quality Control and Assurance of tank inspection, repair and maintenance; and
- Options for improving the inspection, repair and maintenance procedures; and
- Schedule/frequency of modified API 653 tank inspections, repairs and maintenance.~~; and~~
- ~~Tank re-commissioning procedures up to and including the re-filling process.~~

2.3 TIRM Procedures Decision Meeting

Within sixty (60) days from the receipt by the Regulatory Agencies of the TIRM Procedures Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to outline a plan for implementing improved tank inspection, repair and maintenance procedures and propose a schedule for tank inspection, repair and maintenance at the Facility. The specific decisions will not be made during this meeting. The final decisions will be established at the point the Regulatory Agencies approve the TIRM Decision Document.

2.4 TIRM Procedures Decision Document~~/Implementation Plan~~ and Implementation

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a TIRM Decision Document to the Regulatory Agencies for approval. The TIRM Decision Document shall explain the procedures to be used and set forth a TIRM s~~S~~chedule for tank inspection, repair and maintenance and shall include a plan for implementation and schedule for tank inspection and repair. Once approved by the Regulatory Agencies, the Navy and DLA shall implement ~~and operate procedures consistent with~~ the TIRM Decision Document and shall adhere to the TIRM s~~S~~chedule unless modified under Sections 3.5 and 3.6.

3. Tank Upgrade Alternatives

The purpose of the deliverables to be developed and work to be performed under this Section is to identify and evaluate the various tank upgrade alternatives ("TUA") and then select and implement the best available practicable technologies ("BAPT") that can be applied to the in service tanks at the Facility to prevent releases into the environment.

As used in this SOW, BAPT shall mean the release prevention methods, equipment, repair, maintenance, new construction and procedures, or any combination thereof, that offer the best available protection to the environment and that is feasible and cost-effective for the tanks at the Facility. ~~most protection to the environment while considering feasibility and cost-effectiveness.~~ The selection and approval of BAPT shall be based on, but is not limited to, consideration of the following factors: the risks and benefits of the particular technology; the capabilities, feasibility and requirements of the technology and facilities involved; and the cost of implementing and maintaining the technology. Reliance on any one of these factors to the exclusion of other factors is inappropriate.

The Navy and DLA may propose pilot programs to evaluate technologies and use data and conclusions drawn from such pilot programs in the development and evaluation of TUA. The Navy and DLA may also propose pilot programs as part of the re-evaluation of TUA under Section 3.6. A pilot program may only be utilized in a tank with approval from the Regulatory Agencies and shall only become BAPT when approved as such by the Regulatory Agencies. Any proposed pilot program must at

least be designed to provide environmental protection substantially equivalent to that of the currently approved BAPT at the time of the pilot program approval and must include a defined TIRM procedure and schedule. ~~meet the minimum performance standards of any currently approved BAPT.~~ A pilot program, once approved by the Regulatory Agencies, if successfully installed and performing as expected, may continue to be used in a tank as if it had received BAPT ~~modification~~. ~~until that tank is taken out of service in accordance with its TIRM schedule.~~

Commented [HT1]: This is consistent with what is required when making a BAPT decision.

3.1 ~~Initial~~ Scoping Meeting(s) for TUA Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the Scoping Meeting will be to detail the contents of the Scope of Work for the TUA Report. During the meeting, criteria for decision making will be discussed, and a decision will be made as to whether additional Scoping Meetings are needed.

3.2 TUA Scope of Work

Within ninety (90) days from the final Scoping Meeting, the Navy and DLA shall submit the TUA Scope of Work to the Regulatory Agencies for approval.

3.3 TUA Report

Within twelve (12) months from when the Scope of Work is approved, the Navy and DLA shall submit a TUA Report to the Regulatory Agencies for approval. The purpose of the TUA Report is to identify and evaluate the various tank upgrade alternatives that can be applied to the USTs at the Facility. At a minimum, the TUA Report will evaluate the following:

- Current ~~Previous~~ Tank Practices~~Upgrades~~; and
- Secondary Containment Alternatives; and
- Coatings; and
- Liners/Bladders; and
- Associated Leak Detection Systems; and
- Other Alternatives.

3.4 TUA Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the TUA Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to discuss BAPT, the TIRM schedule, and subsequent actions for maintaining, repairing, and upgrading the tank~~USTs~~ at the Facility~~, as well as establishing the environmental performance standards of any proposed pilot technology.~~ Any proposed pilot technology and standards for approval of pilot projects may also be discussed. BAPT will not be approved during this meeting. Final decisions will be established at the point the Regulatory Agencies approve the TUA Decision Document.

3.5 TUA Decision Document and Implementation

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a TUA Decision Document to the Regulatory Agencies for approval. The TUA Decision Document shall define the BAPT to be applied to each in service tank used to store fuel at the Facility and shall include a plan and schedule for implementation of BAPT. The TUA Decision Document ~~schedule for implementation~~

~~of BAPT~~ shall either incorporate ~~into the TUA Decision Document~~ the TIRM s~~S~~chedule approved by the Regulatory Agencies in Section 2 or, consistent with the BAPT identified, incorporate a new TIRM s~~S~~chedule. The TIRM schedule shall set forth the order and schedule that tanks shall receive BAPT, including a schedule for the start of each tank's budget planning cycle.

Once approved by the Regulatory Agencies, the Navy and DLA shall implement the TUA Decision Document in accordance with its TIRM s~~S~~chedule and plan for implementation for in service tanks. The TUA Decision Document shall be revised as necessary to incorporate changes to BAPT as well as changes to~~,~~ the TIRM schedule~~,~~ and plan for implementation as may occur under section 3.6. Tanks that have already begun their budget planning cycle for a previously approved BAPT, but have not completed installation of that BAPT, may have the new BAPT installed, provided all parties agree to a revised schedule for installing the new BAPT on those tanks. ~~Unless the Parties determine that the advantages of the new BAPT are significant enough to warrant upgrade delay and appropriate extensions of deadlines, or the new BAPT is identified early enough in the planning schedule to allow modification without delaying the funding or upgrade process, the Regulatory Agencies will allow for the continued application of previously approved BAPT for tanks that have already entered the budgetary planning cycle.~~

Tanks which have not received BAPT as prescribed by the TUA Decision Document or as amended under Section 3.6, or an approved pilot program technology, shall be temporarily taken out of service no later than twenty-two (22) years from the Effective Date of this AOC, ~~, and t~~Those tanks may only be returned to use when ~~the most recently~~ an approved BAPT, effective at the start of its~~during the~~ respective budget~~ary~~ planning ~~or programming~~ cycle~~for the respective tank or during its repair phase~~ has been applied ~~to them~~. If any BAPT decision requires military construction funding ("MILCON"), an extension of up to 5 years may be granted by the Regulatory Agencies. The Navy and DLA shall make a good faith effort to comply with the original 22 year deadline even if a MILCON is required to meet ~~the initial~~ any BAPT. The start of the budget planning cycle shall be identified in the implementation plan contained in the TUA Decision Document or as amended under Section 3.6.

3.6 Tank Upgrade Alternatives Re-evaluation

At least once every five (5) years from the approval of the initial TUA Decision Document, the Navy and DLA shall complete an evaluation of new technologies to determine if either BAPT or the TIRM s~~S~~chedule, or both, should be modified. The Navy and DLA shall propose a scope and process (i.e., a re-evaluation SOW) to the Regulatory Agencies for their approval for each re-evaluation period no later than one ~~(1)~~ year ~~hundred and eighty (180) days~~ prior to the expiration of that five (5) year interval between re-evaluation periods.

A TUA Re-Evaluation Report shall be submitted to the Regulatory Agencies for approval prior to the expiration of that five (5) year interval between re-evaluation periods. If a new BAPT, TIRM s~~S~~chedule, and plan for implementation, or any combination thereof, is approved, the TUA Decision Document shall be modified accordingly. The Navy and DLA shall implement the modified TUA Decision Document after approval by the Regulatory Agencies.

4. Release Detection / Tank Tightness Testing

The purpose of these deliverables and work to be performed is to document the current release detection system (RDS) and tank tightness testing procedures used at the Facility and to evaluate and implement these procedures and any approved modifications to the ~~RDS and tank tightness testing procedures which could be applied to the~~ Facility.

4.1 Tank Tightness Testing Frequency

Until the approval of the New Release Detection Alternatives Decision Document~~/Implementation Plan~~ as described in Sections 4.6 and 4.8 below, the Navy and DLA shall increase their tank tightness testing from a biennial test to an annual test, continue to use an inventory control monitoring system, and conduct monthly vapor monitoring for all tanks in service.

4.2 Outline for Current Fuel Release Monitoring Systems Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall submit a document outlining the contents of the Current Fuel Release Monitoring Systems Report ("Current Fuel Release Monitoring Systems Report Outline") to the Regulatory Agencies for approval.

4.3 Current Fuel Release Monitoring Systems Report

Within sixty (60) days from approval of the Current Fuel Release Monitoring Systems Report Outline, the Navy and DLA shall submit a Current Fuel Release Monitoring Systems Report to the Regulatory Agencies for approval. At a minimum, the Report shall include:

- Recordkeeping procedures; and
- Dynamic filling procedures for daily operations; and
- Static and Dynamic Release Detection Systems; and
- Release detection sensitivity; and
- ~~Provide t~~The 2008 LDS Study and 2014 Market Survey Update; and.
- Tank re-commissioning procedures up to and including the refilling process.

4.4 ~~Initial~~ Scoping Meeting(s) for New Release Detection Alternatives

Within sixty (60) days from Regulatory approval of the Current Fuel Release Monitoring Systems Report, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the Scoping Meeting will be to detail the contents of the Scope of Work for the study to evaluate possible new or improved release detection alternatives. During the meeting, criteria for decision making will be discussed and a decision will be made as to whether additional Scoping Meetings are needed.

4.5 New Release Detection Alternatives Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the New Release Detection Alternatives Scope of Work to the Regulatory Agencies for approval.

4.6 New Release Detection Alternatives Report

Within twelve (12) months from approval of the New Release Detection Alternatives Scope of Work, the Navy and DLA shall submit a New Release Detection Alternatives Report to the Regulatory Agencies for approval. The New Release Detection Alternatives Report shall include:

- A description of existing practices;
- Static and Dynamic Release Detection System Alternatives;
- Tank tightness alternatives;
- Comparison of existing and alternative technologies effectiveness; and
- Decision Matrix.

4.7 New Release Detection Alternative Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the New Release Detection Alternatives Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to determine subsequent actions for implementing the new release detection alternatives as appropriate. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

4.8 New Release Detection Alternatives Decision Document and/ Implementation ~~Plan~~

Within sixty (60) days after the Decision Meeting, the Navy and DLA shall submit a Release Detection Alternatives Decision Documeni, ~~at and Implementation Plan~~ including an implementation plan and schedule, to the Regulatory Agencies for approval. Once approved by the Regulatory Agencies, the Navy and DLA shall proceed with implementation of the Release Alternatives Decision Document~~/Implementation Plan~~ in accordance with the approved schedule.

5. Corrosion and Metal Fatigue Practices

The purpose of the deliverables and work to be performed~~to be developed~~ under this Paragraph is to evaluate ~~understand~~ the possibility and extent of corrosion and metal fatigue as well as practices to control corrosion and metal fatigue at the Facility. Based on this evaluation, procedures under Sections 2 or 3 of this SOW may be modified to improve control of corrosion and metal fatigue.

The Navy and DLA shall maintain records of and continue efforts to complete internal cleaning and inspection of the aboveground pipelines in the tunnels within the Facility.

5.1 Outline of Corrosion and Metal Fatigue Practices Report

Within thirty (30) days of the Effective Date of the AOC, the Navy and DLA shall submit an outline detailing the contents of the pending Corrosion and Metal Fatigue Practices Report ("Outline of Corrosion and Metal Fatigue Practices Report") to the Regulatory Agencies for approval.

5.2 Corrosion and Metal Fatigue Practices Report

Within sixty (60) days from approval of the Outline of Corrosion and Metal Fatigue Practices Report, the Navy and DLA shall submit a Corrosion and Metal Fatigue Practices Report to the Regulatory Agencies for approval. The Corrosion and Metal Fatigue Practices Report shall include, among other things, an explanation of the current practices for assessing the condition of the tanks and associated fuel containment infrastructure, including details on the non-destructive testing procedures. Additionally, the report will describe the recordkeeping procedures for corrosion and metal fatigue testing and assessment at the Red Hill Facility.

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5.3 Destructive Testing

The purpose of the deliverables to be developed under this Paragraph is to verify the findings of the Corrosion and Metal Fatigue Practices Report through the use of destructive testing on tanks at the Facility.

5.3.1 ~~Destructive Testing~~ Scoping Meeting(s) for Destructive Testing

Within ninety (90) days from the approval of the Corrosion and Metal Fatigue Practices Report, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the Destructive Testing Scope of Work and a decision will be made as to whether additional Scoping Meetings are needed.

5.3.2 Destructive Testing Scope of Work

Within ninety (90) days from the final Destructive Testing Scoping Meeting, the Navy and DLA shall submit a Destructive Testing Scope of Work, including a plan for implementation and a proposed schedule, to the Regulatory Agencies for approval. The Scope of Work shall detail planned destructive testing to be conducted on at least one (1) tank at the Facility. Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the Scope of Work in accordance with the approved schedule contained in the plan.

5.3.3 Destructive Testing Results Report

Within twenty-four (24) months from the approval of the Destructive Testing Scope of Work, the Navy and DLA shall submit the Destructive Testing Results Report to the Regulatory Agencies for approval.

5.4 Decision on Need for and Scope of Modified Corrosion and Metal Fatigue Practices

If the previous tasks in this section indicate the need for evaluation and implementation of potential changes in practices to control corrosion or metal fatigue as determined by the Parties, the Navy and DLA shall, within sixty (60) days from the Regulatory Agencies' approval of the Destructive Testing Results Report, schedule and hold a scoping meeting to be attended by the Parties for the propose of developing appropriate modifications to the scopes of work and timelines in Section 2 and/or Section 3. Additional scoping meetings shall be conducted, and deliverables shall be modified or added using appropriate procedures in Section 2 and/or Section 3, as determined necessary by the Parties, to address any needs for further evaluation, development, or implementation of practices to control corrosion or metal fatigue. Once approved by the Regulatory Agencies, the Navy and DLA shall proceed with implementation of approved modifications.

6. Investigation and Remediation of Releases

The purpose of these deliverables and the work to be performed is to determine the feasibility of alternatives for investigating and remediating releases from the Facility The deliverables shall include:

- The response to the January 2014 release from Tank #5
- An evaluation discussion of potential remediation methods for the January 2014 Tank #5 release and any future releases.

6.1 ~~Initial~~ Scoping Meeting~~(s)~~ for Investigation and Remediation of Releases

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold a~~n initial~~ Scoping Meeting to be attended by the Parties. The purpose of the Scoping Meeting will be to detail the contents of the Investigation and Remediation Releases Scope of Work. During the meeting, the criteria for decision making will be discussed~~, and a decision will be made as to whether additional Scoping Meetings are needed~~.

6.2 Investigation and Remediation of Releases Scope of Work

Within sixty (60) days of the final Scoping Meeting, the Navy and DLA shall submit the Investigation and Remediation of Releases Scope of Work to the Regulatory Agencies for approval.

6.3 Investigation and Remediation of Releases Report

Within twenty-four (24) months from the approval of the Investigation and Remediation of Releases Scope of Work, the Navy and DLA shall submit the Investigation and Remediation Releases Report to the Regulatory Agencies for approval.

6.4 Investigation and Remediation of Releases Decision Meeting

Within sixty (60) days from the Regulatory Agencies' approval of the Investigation and Remediation of Releases Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to evaluate the feasibility to investigate and remediate potential releases from the Facility to the maximum extent practicable. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

6.5 Investigation and Remediation of Releases Decision Document ~~and Implementation Plan~~

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a Decision Document~~ and Implementation Plan~~ for the Investigation and Remediation of Releases, including a proposed plan and ~~proposed~~ schedule for implementation, to the Regulatory Agencies ~~("the Investigation and Remediation of Releases Decision Document and Implementation Plan")~~. Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the Decision Document for the Investigation and Remediation of Releases ~~Decision Document and Implementation Plan~~ in accordance with the approved schedule.

7. Groundwater Protection and Evaluation

The purpose of the deliverables and work to be performed ~~to be developed~~ under this Paragraph is to monitor and characterize the flow of groundwater around the Facility. The Navy and DLA shall update the existing Groundwater Protection Plan to include response procedures and trigger points in the event that contamination from the Facility shows movement toward any drinking water well. The collective work done pursuant this section shall be used to inform subsequent changes to the Groundwater Protection Plan. This task may include the installation of additional monitoring wells as needed.

7.1 Groundwater Flow Model Report

The purpose of this deliverable is to refine the existing groundwater flow model and improve the understanding of the direction and rate of groundwater flow within the aquifers around the Facility.

7.1.1 Initial Scoping Meeting(s) for Groundwater Flow Model Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for the Groundwater Flow Model Report and a decision will be made as to whether additional Scoping Meetings are needed.

7.1.2 Groundwater Flow Model Report Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Groundwater Flow Model Scope of Work to the Regulatory Agencies for approval. The Groundwater Flow Model Scope of Work shall consider interim deliverables to refine the groundwater flow modeling and related data requirements prior to completion of the Groundwater Flow Model Report. At a minimum, progress reports shall be provided to the Regulatory Agencies every four (4) months after approval of the Groundwater Flow Model Report Scope of Work.

7.1.3 Groundwater Flow Model Report

Within twenty-four (24) months from the approval of the Groundwater Flow Model Report Scope of Work, the Navy and DLA shall submit a Groundwater Flow Model Report to the Regulatory Agencies for approval.

7.2 Contaminant Fate and Transport Model Report

The purpose of the Contaminant Fate and Transport Model Report is to utilize the groundwater flow model to improve the understanding of the potential fate and transport, degradation, and transformation of contaminants that have been and could be released from the Facility.

7.2.1 Initial Scoping Meeting(s) for Contaminant Fate and Transport Model Report

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for the Contaminant Fate and Transport Model and a decision will be made as to whether additional Scoping Meetings are needed.

7.2.2 Contaminant Fate and Transport Model Report Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Contaminant Fate and Transport Model Scope of Work to the Regulatory Agencies for approval.

7.2.3 Contaminant Fate and Transport Model Report

Within one-hundred and eighty (180) days from the Groundwater Flow Model Report Approval, the Navy and DLA shall submit a Contaminant Fate and Transport Model Report to the Regulatory Agencies for approval.

7.3 Groundwater Monitoring Well Network

The primary purpose of the deliverable is to evaluate the number and placement of groundwater monitoring wells required to adequately identify possible contaminant migration. The secondary purpose of this deliverable is to obtain additional data for the Groundwater Flow Model and Contaminant Fate and Transport Model Report.

7.3.1 ~~Initial~~ Scoping Meeting for Groundwater Monitoring Well Network

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for the Groundwater Monitoring Well Network. During the meeting, the criteria for decision making will be discussed and a decision will be made as to whether additional Scoping Meetings are needed.

7.3.2 Groundwater Monitoring Well Network Scope of Work

Within ninety (90) days from the ~~F~~final Scoping Meeting, the Navy and DLA shall submit the Groundwater Monitoring Well Network Scope of Work to the Regulatory Agencies for approval. The Groundwater Monitoring Well Network Scope of Work shall consider whether interim deliverables for developing a groundwater monitoring well network are needed for the development of the groundwater flow modeling and related data requirements.

7.3.3 Groundwater Monitoring Well Network Draft Final Report

Within twelve (12) months from approval of the Groundwater Flow Model Report, the Navy and DLA shall submit a Groundwater Monitoring Well Network Report. This report will include a recommendation of the number and location of groundwater monitoring wells including those already installed and potential new wells to the Regulatory Agencies for approval.

7.3.4 Groundwater Monitoring Well Network Decision Meeting

Within sixty (60) days from approval of the Groundwater Monitoring Well Network Report, the Navy and DLA shall schedule and hold a Decision Meeting to be attended by the Parties. The purpose of the Decision Meeting is to evaluate subsequent actions for implementing the Groundwater Monitoring Well Network. The specific decisions will not be made during this meeting. The final decisions will be established at the point the regulatory agencies approve the decision document.

7.3.5 Groundwater Monitoring Well Network Decision Document and ~~/~~Implementation ~~Plan~~

Within sixty (60) days from the Decision Meeting, the Navy and DLA shall submit a Decision Document ~~and Implementation Plan~~ for the Groundwater Modeling Well Network, including a proposed implementation plan and schedule, to the Regulatory Agencies for approval. Once approved by the Regulatory Agencies, the Navy shall proceed with implementation of the Decision Document ~~and Implementation Plan~~ for the Groundwater Modeling Well Network in accordance with the approved schedule.

8. Risk/Vulnerability Assessment

The purpose of the deliverable and work to be performed ~~to be developed~~ under this Paragraph is to assess the level of risk the Facility may pose to the groundwater and drinking water aquifers and to inform the parties in subsequent development of BAPT decisions.

The Risk/Vulnerability Assessment Report may include:

- A risk matrix;
- Probability of catastrophic events (seismic events, leaks);
- Hydrology studies, as completed;
- Probability of mechanical and human errors; and
- Effectiveness of risk mitigation and protective measures.

8.1 ~~Initial~~ Scoping Meeting(s) for Risk/Vulnerability Assessment

Within thirty (30) days from the Effective Date of the AOC, the Navy and DLA shall schedule and hold an initial Scoping Meeting to be attended by the Parties. The purpose of the scoping meeting will be to detail the contents of the draft Scope of Work for Risk/Vulnerability Assessment and a decision will be made as to whether additional Scoping Meetings are needed.

8.2 Risk/Vulnerability Assessment Scope of Work

Within ninety (90) days from the Final Scoping Meeting, the Navy and DLA shall submit the Risk/Vulnerability Assessment Scope of Work to the Regulatory Agencies for approval.

8.3 Initial Risk/Vulnerability Assessment Report

Within eighteen (18) months from the Regulatory Agencies' approval of the Risk/Vulnerability Assessment Scope of Work, the Navy and DLA shall submit an Initial Risk/Vulnerability Assessment Report to the Regulatory Agencies for approval. The Risk/Vulnerability assessment may be revised as new information becomes available. All revisions to the document shall be submitted to the Regulatory Agencies for approval.

9. Deliverables Table

Commented [DAT3]: Need to update Deliverables Table once SOW finalized. Ensure Sections, Titles, Deliverables and Dates match.

Subject	Deliverables	Dates
Section 2		
Tank Inspection and Repair Procedures	2.1 - Scoping Meeting	Within 30 days from AOC
	2.2 - Tank Inspection and Repair Procedures Report	Within 120 days from Scoping Meeting
	2.3 - Decision Meeting	Within 60 days from Report Receipt
	2.4 - Decision Document/Implementation Plan	Within 60 days from Decision Meeting
Section 3		
Tank Upgrade Alternatives	3.1 - Initial Scoping Meeting	Within 30 days from AOC
	3.2 - Scope of Work Submittal	Within 90 days from final Scoping Meeting
	3.3 - Tank Upgrade Alternatives Report	Within 12 months from Scope Approval
	3.4 - Decision Meeting	Within 60 days from Report Approval
	3.5 - Decision Document/Implementation Plan	Within 60 days from Decision Meeting
	3.6 - Tank Upgrade Alternatives Re-evaluation	At least once every 5 years from Decision Document Approval
Section 4		
Release Detection / Tank Tightness Testing	4.1 - Tank Tightness Testing Frequency	No later than 1 year from AOC
	4.2 - Outline of Current Fuel Release Monitoring Systems Report	Within 30 days from AOC
	4.3 - Current Fuel Release Monitoring Systems Report	Within 60 days from Approval of Outline
	4.4 - Scoping Meeting for New Technology	Within 60 days from Report Approval
	4.5 - Scope of Work Submittal	Within 90 days from final Scoping Meeting
	4.6 - Final Report	Within 12 months from Scope Approval
	4.7 - Decision Meeting	Within 60 days from Report Approval
	4.8 - Decision Document/Implementation Plan	Within 60 days from Decision Meeting
Section 5		
Corrosion and Metal Fatigue Practices	5.1 - Outline of Corrosion and Metal Fatigue Report	Within 30 days from AOC
	5.2 - Corrosion and Metal Fatigue Assessment Report	Within 60 days from Outline Approval
	5.3.1 - Scoping Meeting for Destructive Testing	Within 90 days from Report Approval
	5.3.1 - Scope of Work Submittal for Destructive Testing	Within 90 days from Scoping Meeting
	5.3.2 - Destructive Testing Results Report	Within 24 months from Scope Approval
	5.4 - Decision on Need for Modified Practices Evaluation	TBD, Meeting w/in 60 days of Report Approval if Required
Section 6		
Investigation and Remediation of Releases	6.1 - Scoping Meeting	Within 30 days from AOC
	6.2 - Scope of Work Submittal	Within 60 days from final Scoping Meeting
	6.3 - Investigation and Remediation of Releases Report	Within 24 months from Scope Approval

	6.4 - Decision Meeting	Within 60 days from Report Approval
	6.5 - Decision Document/Implementation Plan	Within 60 days from Decision Meeting
Section 7 **Groundwater Protection and Evaluation**		
Section 7.1 *Groundwater Flow Model Report*	7.1.1 - Scoping Meeting	Within 30 days from AOC
	7.1.2 - Scope of Work Submittal	Within 90 days from final Scoping Meeting
	7.1.3 - Groundwater Flow Modeling Report	Within 24 months from Scope Approval
Section 7.2 *Contaminant Fate and Transport Model*	7.2.1 - Scoping Meeting	Within 30 days from AOC
	7.2.2 - Scope of Work Submittal	Within 90 days from Scoping Meeting
	7.2.3 - Contaminant Fate and Transport Model Report	Within 180 days from GW Flow Model Report Approval
Section 7.3 *Groundwater Monitoring Well Network*	7.3.1 - Initial Scoping Meeting	Within 30 days from AOC
	7.3.2 - Scope of Work Submittal	Within 90 days from Scoping Meeting
	7.3.3 - Final Groundwater Monitoring Well Network Report	Within 12 months from GW Flow Report Approval
	7.3.4 - Decision Meeting	Within 60 days from GW Monitoring Well Network Report
	7.3.5 - Implementation Plan/Decision Document	Within 60 days from Decision Meeting
Section 8 **Risk/Vunerability Assessment**		
	8.1 - Scoping Meeting	Within 30 days from AOC
	8.2 - Scope of Work Submittal	Within 90 days from final Scoping Meeting
	8.3 - Initial Risk/Vulnerability Assessment Report	Within 18 months of Scope Approval